

Belah and brigalow plains on texture contrast soils



Landform

Level to gently undulating plains.

Occurring on flat plains or sloping lowlands in the middle of the region around Billa Billa, Wyaga, Yagaburne, Mt Carmel, Moruya, Wynhari, and Kurumbul.

Woody vegetation

Tall, open forests of belah with brigalow, and understorey of wilga and false sandalwood. Occasionally associated with nipan, wild orange and limebush.

Most of the belah plains were cleared of woody vegetation in the 1950s for prime cropping land.

Expected pasture composition

** Denotes non-native "Expected Pasture Composition" species.*

Very little pasture in native wooded state; high pasture cover where treeless, often with sown pastures.

Preferred

Brigalow grass, curly windmill grass, Queensland bluegrass.

Intermediate

Early spring grass, slender panic, fairy grass.

Non-preferred

Lovegrasses (weeping, dainty, woodland), white speargrass.

Annuals

Liverseed grass*, stinkgrass*.

Suitable sown pastures

Creeping bluegrass, digit grass, tall finger grass, Gatton panic, Rhodes grass, buffel grass.

Barrel and burr medics, Caatinga stylo, desmanthus.

Introduced weeds

Prickly pear, velvet tree pear, lippia, mother-of-millions, harrisia cactus.

Soil

Friable, shallow, black or brown, texture-contrast soil (sodosols).

Description

Surface: Firm to hard-setting; **Surface texture:** clay loam; **Subsoil texture:** medium to heavy clay.

Water availability

Medium; effective rooting depth 60–110 cm, PAWC 110–140 mm.

Fertility	Low to medium.
Salinity	Non-saline or low salinity at the surface. Medium to very high salinity at depth (below 20 cm).
Sodicity	Strongly sodic subsoils.
pH	Neutral at surface, acid subsoils.

Long-term carrying capacity information (A condition)

Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day				
Median annual rainfall 534 – 678 mm				
Pasture type	Median tree cover (TBA m ² /ha) (FPC %)	Median annual pasture growth (DM kg/ha)	Safe annual utilisation pasture growth (%)	LTCC (ha/AE)
Native species	0 TBA/FPC	2800 - 3930	30% (sown)	2.5 - 3.5
	10 TBA 25 FPC	1300 - 2100	30% (sown)	4.6 – 7.5
Buffel	0 TBA/FPC	3630 - 4620	35%	1.8 – 2.3

Enterprise

Growing and finishing.

Land use and management recommendations

- Suitable land for growing and finishing, and dryland cropping, with minor limitations.
- Undisturbed soils are generally well structured and permeable, becoming prone to dispersion when exposed.
- Minimum tillage on these soils may improve the overall structure and friability of seedbed.
- Deep tillage is not recommended. Soils below 0.5–1.0 m should be left undisturbed to reduce possibility of exposing sodic and acid subsoils.
- Maximise ground cover, replacing organic matter through long-term pasture phases, and adoption of conservation tillage practices should minimise soil disturbance and improve seedbed conditions.
- Manage grazing pressure to maximise ground cover and to minimise risk of erosion of dispersive soils.

Land use limitations

- Exposure of subsoils may cause problems with dispersion and acidity.
- Risk of erosion increases on the slopes.

Conservation features and related management

- Extensively cleared or thinned for cropping and pasture, with remaining brigalow and/or belah or other understorey *Acacia* species often forming small clumps or tree lines.
- As appreciable areas of native pastures or natural dense woodlands are rare, these clumps and tree lines of brigalow and/or belah are managed primarily as conservation reserves.
- Habitat for rare and threatened species including the nomadic painted honeyeater *Grantiella picta*. This species feeds on mistletoe fruits that grow on eucalypts and acacias.
- These communities are considered sensitive to fire.

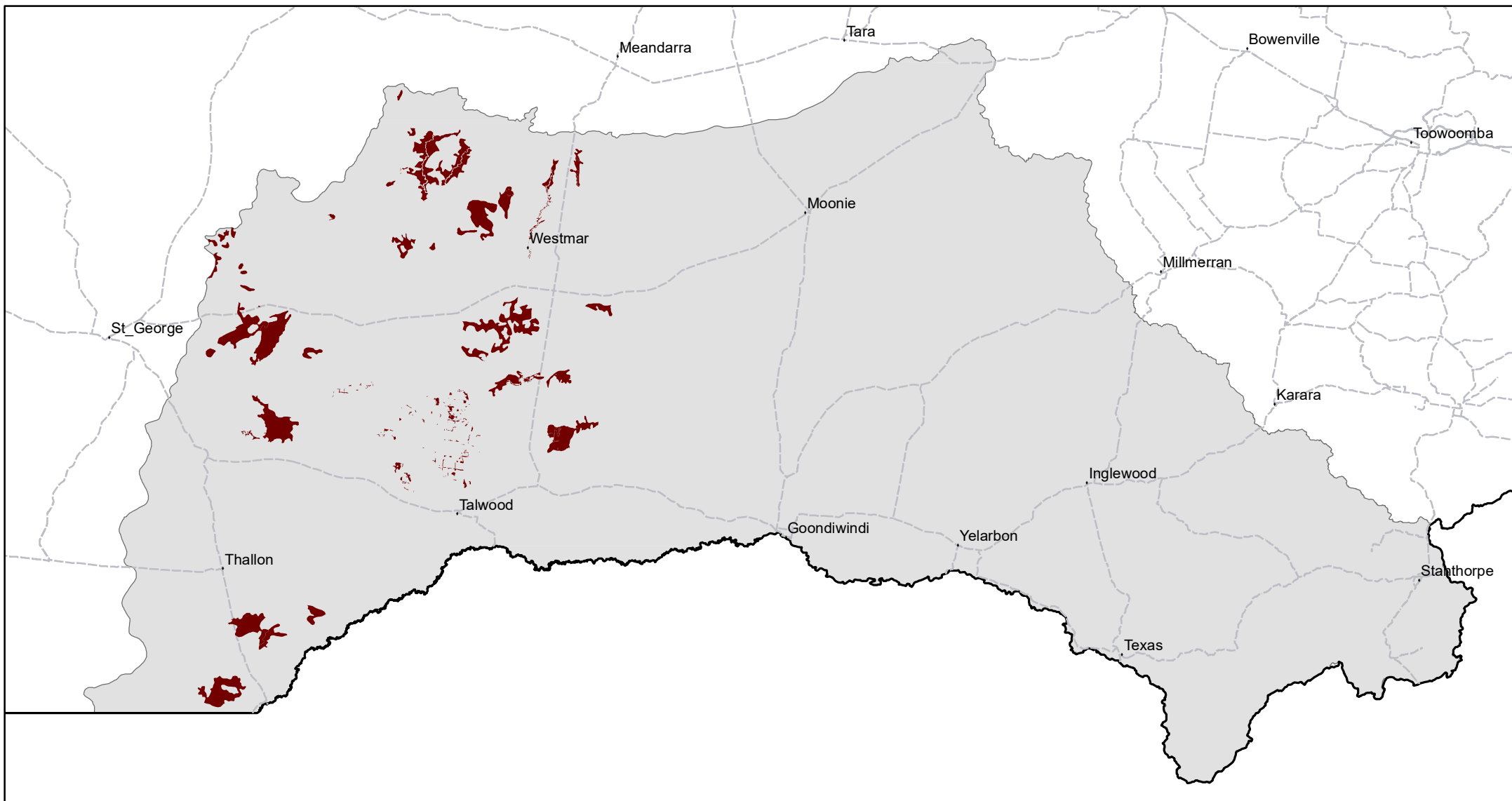
Regional Ecosystems

11.3.1d, 11.4.7, 11.4.1.

Land Resource Areas; Land types; Soil associations

Land Resource Area (Thwaites and Macnish 1991) Billa Billa. Soils associations (Lloyd 1977, 1980) F13, Ro4 Belah.

BR01 Belah and brigalow plains on texture contrast soils



Area of land type in region: 2%
Median rainfall (region): 469 – 748 mm
Average rainfall (region): 516 – 758 mm
Area of land type with FPC: 20%
Median FPC: 24%
Median TBA: 10 m²/ha



Queensland
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